

SURREBUTTAL TESTIMONY OF

DAVID J. GARRETT

ON BEHALF OF

THE SOUTH CAROLINA OFFICE OF REGULATORY STAFF

DOCKET NO. 2021-153-S

I. INTRODUCTION

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is David J. Garrett. My business address is 101 Park Avenue, Suite 1125,
3 Oklahoma City, Oklahoma 73102.

4 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

5 A. I am the managing member of Resolve Utility Consulting, PLLC. I am an
6 independent consultant specializing in public utility regulation.

7 **Q. DID YOU FILE DIRECT TESTIMONY AND EXHIBITS RELATED TO THIS**
8 **PROCEEDING?**

9 A. Yes. I filed direct testimony and 17 exhibits with the Public Service Commission
10 of South Carolina (“Commission”) on September 30, 2021, on behalf of the South Carolina
11 Office of Regulatory Staff (“ORS”). In my direct testimony, I addressed the cost of equity
12 estimate and rate of return recommendation for Palmetto Wastewater Reclamation, Inc.
13 (“PWR” or the “Company”), as discussed by PWR Witness Paul R. Moul. My
14 qualifications also were discussed in my direct testimony.

15 **Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY?**

16 A. My surrebuttal testimony will respond to issues raised in the rebuttal testimonies of
17 Company Witnesses Moul and Craig Sorensen.

Q. DO ANY OF THE ARGUMENTS WITNESSES MOUL AND SORENSEN RAISE IN THEIR REBUTTAL TESTIMONIES CAUSE YOU TO CHANGE YOUR POSITION AS STATED IN YOUR DIRECT TESTIMONY?

A. No. Additionally, to the extent I do not specifically address a statement made in any of the Company's rebuttal testimony, that should not be construed as an agreement with the same.

Q. PLEASE SUMMARIZE YOUR SURREBUTTAL TESTIMONY.

A. In my surrebuttal testimony, I respond to several pertinent issues discussed in Witness Moul's rebuttal testimony, including (1) capital structure; (2) the growth rate input to the Discounted Cash Flow ("DCF") Model; (3) the Capital Asset Pricing Model ("CAPM"); and (4) the leverage adjustment. I also respond to statements made regarding return on equity ("ROE") in Witness Sorensen's rebuttal testimony.

II. CAPITAL STRUCTURE

Q. PLEASE SUMMARIZE WITNESS MOUL'S REBUTTAL TESTIMONY REGARDING CAPITAL STRUCTURE.

A. Witness Moul disagrees with my capital structure proposal. He suggests there is no basis to deviate from the Company's actual capital structure¹ and that my capital structure proposal "is simply designed to lower the revenue requirement."²

¹ Rebuttal Testimony of Paul R. Moul, p. 9, lines 18-23.

² *Id.* at lines 11-13.

**Q. WHAT IS YOUR RESPONSE TO WITNESS MOUL'S REBUTTAL TESTIMONY
REGARDING CAPITAL STRUCTURE?**

A. First, Witness Moul is wrong when he says that my proposals are *designed* to lower the revenue requirement. Witness Moul has no basis to make that assertion; moreover, he is incorrect. Because Witness Moul's filed positions regarding the company debt ratio (and ROE) are so unreasonably high, any reasonable adjustment to those proposals will naturally result in a lower revenue requirement, all else held constant. In light of the evidence presented in my testimony, my proposed debt ratio of 50% is quite reasonable. PWR's capital structure ratios can be easily changed without the Company entering the bond market.³ Further, the average debt ratio of Witness Moul's own proxy group is 50% based on 2020 data.

III. DCF GROWTH RATES

**Q. PLEASE SUMMARIZE WITNESS MOUL'S REBUTTAL TESTIMONY
REGARDING THE GROWTH RATE INPUT TO THE DCF MODEL.**

A. Witness Moul's rebuttal testimony regarding the growth rate I used in my DCF model is difficult to reconcile. Witness Moul correctly acknowledges that I used one of the same growth rates considered in his own DCF analyses. In other words, on this particular issue, I conducted my own DCF Model using Witness Moul's growth rate assumptions. Despite this fact, Witness Moul concludes that my DCF analysis should be

³ PWR's debt at the time this application was filed was comprised of intercompany debt rather than externally sourced bonds and other debt instruments. See PWR Response to ORS Information Request 2-30.

dismissed and that the DCF growth rates I propose do not provide a reasonable input to the DCF Model.⁴

Q. DO YOU HAVE A RESPONSE TO WITNESS MOUL’S REBUTTAL TESTIMONY REGARDING THE DCF GROWTH RATE?

A. Yes. As part of my DCF analysis presented in my direct testimony, I considered potential growth rates from several sources and discussed why it is prudent for U.S. gross domestic product (“GDP”) to typically be a limiting factor on the long-term growth rate input to the DCF Model. However, I also acknowledged in my testimony the potential unique growth opportunities of water utilities in the proxy group, and how those growth opportunities likely apply downward pressure on dividend yields. The growth rate I ultimately selected in my DCF Model is considered in Witness Moul’s own DCF Model. What my analysis demonstrates is that when reasonable inputs to the DCF Model are used, the resulting ROE is still only 8.0%, even if the Company’s proposed growth rate is included.

IV. CAPM ANALYSIS

Q. PLEASE SUMMARIZE WITNESS MOUL’S REBUTTAL TESTIMONY REGARDING YOUR CAPM RESULTS.

A. Witness Moul claims that the results of my CAPM are “simply not credible,”⁵ but fails to provide any evidentiary support for this assertion.

⁴ Rebuttal Testimony of Paul R. Moul, p. 18, lines 10-24.

⁵ Rebuttal Testimony of Paul R. Moul, p. 23, line 4.

1 **Q. PLEASE SUMMARIZE THE INPUTS AND RESULTS OF YOUR CAPM AND**
2 **HOW THEY DIFFER FROM WITNESS MOUL’S.**

3 A. The result of my CAPM is reasonable and credible. The CAPM is a Nobel Prize-
4 winning financial model that has three inputs: (1) risk-free rate; (2) beta; and (3) the ERP.
5 I will summarize and contrast the sources of these inputs between my CAPM and Witness
6 Moul’s CAPM.

7 1. Risk-free rate

8 Financial analysts use the yield on Treasury securities as a proxy for the risk-free
9 rate.⁶ I used a recent 30-day average on the daily yields on 30-year Treasury bonds as a
10 proxy for the risk-free rate in my CAPM. This is a very reasonable approach. In contrast,
11 Witness Moul relies on *projected* bond yields and goes so far to say that “the CAPM
12 *mandates* using prospective 30-year Treasury bond yields, leverage adjusted betas, and size
13 adjustment” in his rebuttal testimony.⁷ When asked in discovery to provide copies of all
14 theoretical and empirical studies relied upon to support that statement, he responded that
15 he “did not rely upon sources other than his direct testimony [at pp. 33-34].”⁸ The
16 testimony he provides on the referenced pages of his direct testimony *does not support* his
17 claim that the CAPM “mandates” the use of prospective or projected bond yields. While
18 the process of cost of equity estimation is a forward-looking concept, it does not require
19 the use of prospective bond yields as a proxy for the risk-free rate. In my experience, both

⁶ See David C. Parcell, The Cost of Capital – A Practitioner’s Guide, prepared for the Society of Utility and Regulatory Financial Analysts (“SURFA”), p. 106.

⁷ Rebuttal Testimony of Paul R. Moul, p. 4, lines 2-4 (emphasis added).

⁸ PWR Response to ORS Information Request 15-5.

1 in the academic and regulatory environment, most analysts use the current yields on U.S.
2 Treasury securities as a proxy for the risk-free rate. The analysts who use prospective bond
3 yields for the risk free rate typically represent utility companies, and the prospective bond
4 yields used in such analyses are inevitably higher than the current bond yields at that time.
5 The inputs to the CAPM, including 20-year or 30-year bond yields and the equity risk
6 premium, are sufficiently “forward-looking” without the use of prospective (i.e., higher)
7 bond yields for the risk-free rate.

8 Further, I have reviewed dozens of utility ROE testimonies dating back more than
9 20 years. In nearly every one of those cases, the witness representing the utility relied on
10 a forward-looking or projected Treasury bond yield for the risk-free rate, instead of relying
11 on the current, *known* Treasury bond yield. In fact, I cannot recall a single instance in
12 which the utility’s projected bond yield was *lower* than the current bond yield. In other
13 words, I cannot recall a single case in which a utility witness’s prediction of the future did
14 not, all else held constant, result in a higher cost of equity estimate in the present. This
15 reliance on projected bond yields is misplaced, given that the projections often overstate
16 the actual yields.

17 To illustrate this disparity, Table 1 provides a comparison of forecasted 30-year
18 Treasury bonds as provided by the consensus projections published in Blue Chip Financial
19 Forecasts and actual yields for the third quarter of each of the last five years.

Table 1: Projected and Actual Yields on 30-Year Treasury Bonds

Blue Chip Publication Date	Forecast Period	30-Year T Bonds		Comparison
		Forecast	Actual	
		[1]	[2]	[3]
May 2020	2021Q3	1.80%	1.93%	-0.13%
May 2019	2020Q3	3.20%	1.36%	1.84%
May 2018	2019Q3	3.80%	2.28%	1.52%
May 2017	2018Q3	3.70%	3.06%	0.64%
May 2016	2017Q3	3.50%	2.82%	0.68%
[1] Source: Blue Chip Financial Forecast for indicated date.				
[2] Yahoo! Finance for ^TYX. https://finance.yahoo.com/				
[3] = [1] - [2]. Positive values indicate years where consensus forecasts exceeded actual yields.				

As Table 1 shows, for four out of the last five years, the third quarter forecasts have exceeded the actual yield for each period, illustrating how using projected instead of historical yields (which are known and measurable) overstates utility costs of equity. Witness Moul's risk-free rate input of 2.75% in this case continues that trend. After observing this trend of forecasted yields exceeding actual yields over many years without exception, it reinforces my opinion that it is preferable to use known (current) bond yields rather than unknown (future) bond yields.

2. Beta

For the beta input in my CAPM, I relied on the betas published by Value Line. In my experience, the vast majority of ROE witnesses in utility rate proceedings (representing both utilities and customers) rely on Value Line betas without further adjustment. In contrast, Witness Moul takes the unusual approach of making an upward adjustment to Value Line's published betas, which causes a higher CAPM result.

1 3. ERP

2 Witness Moul criticized my use of the historical 30-day lookback to get an average
3 yield on T-bonds for my risk-free rate and described it as “backward-looking.”⁹ However,
4 Witness Moul relies on data that predates the discovery of penicillin and bubble gum for
5 his ERP estimate. Relying on data dating back to 1926 is not a reasonable approach in
6 estimating the ERP.¹⁰ As discussed in my direct testimony, there is substantial evidence
7 showing that the current and forward-looking ERP is notably lower than the historical ERP
8 (especially if one begins their historical ERP analyses before the Great Depression). In
9 contrast to Witness Moul’s approach, I relied on a survey of thousands of unbiased experts
10 in helping develop a reasonable estimate for the ERP. I also looked at the estimate
11 published by Duff & Phelps, which is a respected, international corporate advising firm,
12 and the estimate published by one of the world’s leading experts on the ERP – Dr. Aswath
13 Damodaran. The *highest* ERP from these sources is 5.6% (notably lower than Witness
14 Moul’s 9.0% estimate). I used this 5.6% in my analysis.

15 **Q. WHAT DO YOU CONCLUDE ABOUT THE RESULTS OF YOUR CAPM**
16 **ANALYSES AS COMPARED WITH WITNESS MOUL’S RESULTS?**

17 A. I used reasonable, objective figures for each of the three CAPM inputs. The current
18 risk-free rate is known. It does not require a subjective estimate or adjustment. The betas
19 used in my analysis are published by Value Line. To my knowledge, Value Line does not
20 have any conflict of interest with either utilities or ratepayers that might affect their

⁹ Rebuttal Testimony of Paul R. Moul, p. 25, lines 13-14.

¹⁰ See Exhibit PRM-1, Sch. 13.

judgment. The ERP used in my analysis comes from a survey of thousands of unbiased experts. Based on these inputs, the results of my CAPM are quite reasonable. That result indicates a cost of equity of 6.3% for PWR.

V. LEVERAGE ADJUSTMENT

Q. PLEASE SUMMARIZE WITNESS MOUL’S REBUTTAL TESTIMONY REGARDING HIS LEVERAGE ADJUSTMENT.

A. Witness Moul asserts that I “never really refute” his leverage adjustment and that I employ his leverage adjustment approach through the use of a similar mathematical technique as part of my capital structure analysis, thereby “validating [his] approach.”¹¹

Q. WHAT IS YOUR RESPONSE TO WITNESS MOUL’S REBUTTAL TESTIMONY REGARDING THE LEVERAGE ADJUSTMENT?

A. Witness Moul’s rebuttal to my testimony regarding the leverage adjustment is factually incorrect and potentially misleading. First, I do not use Witness Moul’s leverage adjustment as part of my capital structure analysis. In addition, Witness Moul’s claim that I “never really refute” his leverage adjustment is inaccurate. I spend several pages in my direct testimony refuting this unreasonable adjustment, and I perform a calculation that mathematically shows my disagreement with his adjustment and present my findings in an exhibit.¹² I conclude the discussion in my direct testimony by stating: “Witness Moul’s leverage adjustment is entirely inappropriate and should be rejected by the Commission.”¹³

¹¹ Rebuttal Testimony of Paul R. Moul, p. 20, lines 1-7.

¹² Direct Testimony of David J. Garrett, pp. 46-48; *see also* Exhibit DJG-17.

¹³ *Id.* at p. 48, lines 3-4.

Witness Moul also states: “[Mr. Garrett] employs my leverage adjustment approach through the use of the Hamada formula to unlever and relever betas as part of his capital structure analysis, thereby validating my approach.”¹⁴ No part of this statement is correct. It is true that the Hamada mathematical technique could be used as part of a reasonable, objective capital structure analyses when reasonable inputs to the model are used, but I did not perform such an analysis in this case.

VI. SORENSEN REBUTTAL TESTIMONY

Q. PLEASE SUMMARIZE WITNESS SORENSEN’S REBUTTAL TESTIMONY.

A. Witness Sorensen discusses ROE recommendations and awards for recent rate cases involving South Carolina Department of Consumer Affairs (“DCA”) Witness Aaron L. Rothschild and myself, as well as for PWR and its affiliates.

Q. WHAT IS YOUR RESPONSE TO WITNESS SORENSEN’S REBUTTAL TESTIMONY REGARDING ROE?

A. Based on the data provided in the table on page 2 of his rebuttal testimony, Witness Sorensen illustrates that my ROE recommendations are often at or near the ROE awarded to the subject utility by the regulatory body. For the five rate cases he includes in which I participated and an awarded ROE is publicly available, my recommendations were, on average, 37 basis points below the awarded ROE. This includes the recent El Paso Electric rate case in which the New Mexico PUC accepted my ROE recommendation of 9.0%.

¹⁴ Rebuttal Testimony of Paul R. Moul, p. 30, lines 18-19 through p. 31, lines 1-2.

Witness Sorensen also provides a table on page 4 of his rebuttal testimony that includes recent ROEs granted to PWR and its affiliates in seven rate cases in various jurisdictions. Excluding the one rate case in this table where an ROE range is provided, the average ROE recently awarded for PWR and its affiliates was 9.38%. My recommended 8.9% ROE is significantly closer to 9.38% than the 10.95% sought by the Company through Witness Moul's testimony. I also note that, per discovery responses from PWR, each of these ROEs resulted from a settlement agreement between parties rather than litigation.¹⁵

Q. DID YOU ALSO CONSIDER THE ROES WITNESS MOUL HAS RECOMMENDED IN RECENT RATE CASES?

A. Yes. To consider the ROE recommendations and subsequent awarded ROEs for only two of the three expert witnesses in this case, as Witness Sorensen has done in his rebuttal testimony, provides an incomplete picture. ORS issued discovery on PWR to gather information on the rate cases in which Witness Moul has testified for the last five years. The response provided a list of the 41 testimonies he has filed in rate cases since 2017.¹⁶ Of those, Witness Moul provided his proposed ROE for each and the subsequent ROE awarded to the subject utility for two of the rate cases. In a short period of time, ORS was able to verify the awarded ROE for three additional cases: CLEO Power's 2019

¹⁵ PWR Response to ORS Information Request 15-12. The one exception is the 2021 Ni Florida, Inc. case, for which a response of "N/A**" was provided. This is also the rate case with an ROE range that is excluded from my calculation.

¹⁶ PWR Response to ORS Information Request 15-1. The two rate cases for which Witness Moul identified awarded ROEs were both filed in Pennsylvania in 2020: PECO Energy Company – Gas Division and Columbia Gas of Pennsylvania.

1 Louisiana rate case, New Jersey Natural Gas Company's 2019 New Jersey rate case, and
2 South Jersey Gas Company's 2017 New Jersey rate case. The average ROE awarded for
3 this subset of rate cases (i.e., the two identified by Witness Moul in discovery and the three
4 additional cases identified by ORS) is almost 120 basis points below Witness Moul's ROE
5 recommendation of 10.95%. For comparison, Witness Moul's average proposed ROE for
6 these five cases is only slightly below his ROE recommendation in this proceeding.¹⁷ It is
7 important to note these figures do not include his recommendation in the current
8 proceeding. Further, 16 of Witness Moul's rate cases since 2017 were overseen by the
9 Pennsylvania Public Utility Commission ("PA PUC"). In this jurisdiction, the vast
10 majority of rate cases are settled with black box settlements and, thus, few go to hearing or
11 have a publicly reported awarded ROE.

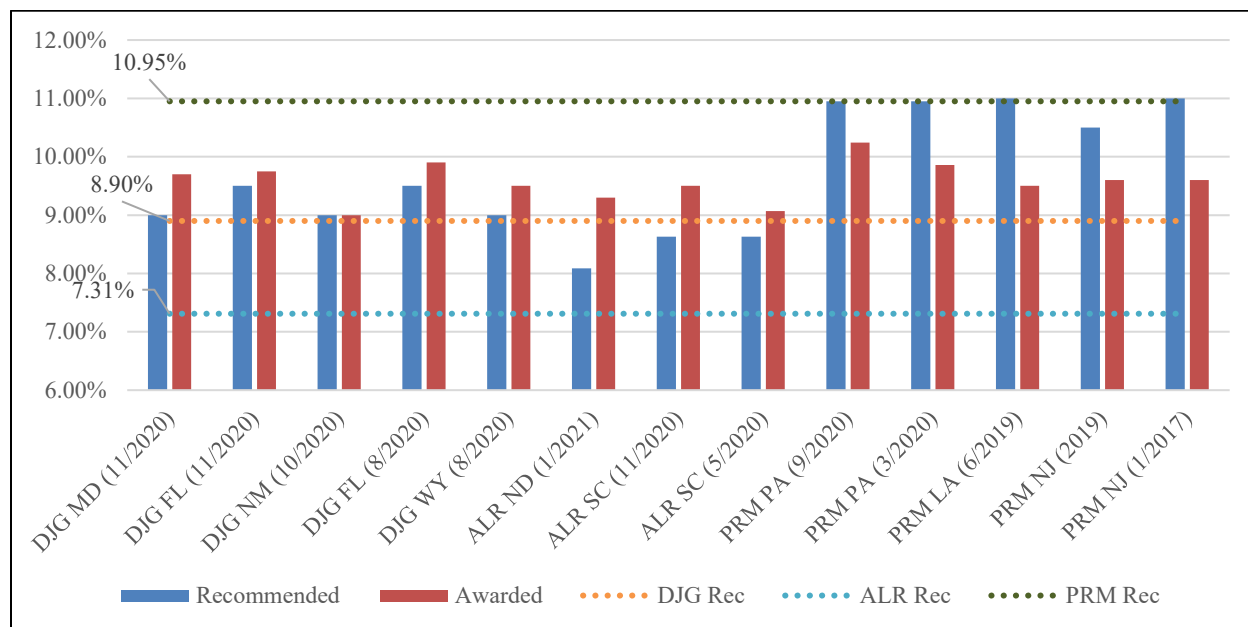
12 Figure 1 provides the recommended and awarded ROEs for my five and Witness
13 Rothschild's three rate cases mentioned in Witness Sorensen's rebuttal testimony,¹⁸ as well
14 as the five rate cases identified for Witness Moul (i.e., the two identified by Witness Moul
15 and the three additional cases identified by ORS). The additional rate cases listed by
16 Witness Sorensen for Witness Rothschild and myself are excluded as an awarded ROE
17 figure was not provided in Witness Sorensen's testimony.¹⁹

¹⁷ For all 41 rate cases identified by Witness Moul, his average proposed ROE exceeds his ROE recommendation of 10.95% by nearly 150 basis points. This includes 17 Federal Energy Regulatory Commission ("FERC") dockets.

¹⁸ Rebuttal Testimony of Craig Sorensen, pp. 2-3.

¹⁹ The rate case in which I testified and for which Witness Sorensen does not provide an awarded ROE figure is the 2021 ABACO Energy Services, LLC case in Montana. The awarded ROE in that case was the result of a black box settlement and is thus not public.

Figure 1: Comparison of ROE Experts' Recommendations and ROEs Awarded



As shown in Figure 1, my proposed ROEs for these rate cases typically fell just below the ultimate ROE awarded for the subject utility (by an average of -37 basis points). Witness Rothschild's proposed ROEs also fell below the ROE ultimately awarded (by an average of -84 basis points). With respect to Witness Moul's rate cases, however, he proposed an ROE *above* what is ultimately awarded to the subject utility (by an average of 112 basis points). The horizontal lines in Figure 1 represent the recommended ROEs of each expert witness in this rate case.

Q. ON PAGE 5 OF HIS REBUTTAL TESTIMONY, WITNESS SORESENSEN STATES THAT YOUR RECOMMENDED ROE WOULD "PUT PWR AT A DISTINCT DISADVANTAGE IN ATTRACTING THE CAPITAL NECESSARY TO OPERATE, MAINTAIN, AND IMPROVE ITS SYSTEM." PLEASE RESPOND.

1 A. Witness Sorensen has provided no evidence to support the contention that PWR
2 would be disadvantaged in terms of “attracting the capital necessary to operate, maintain,
3 and improve its system”²⁰ if my recommended ROE was adopted. As part of this
4 proceeding, the Commission will make a determination regarding reasonable operating and
5 maintenance expenses to be recovered through rates, which, once recovered, can be applied
6 to the items they were designed to cover.

7 **Q. ON PAGES 6 TO 7 OF HIS REBUTTAL TESTIMONY, WITNESS SORENSEN**
8 **CLAIMS THAT MANAGERIAL PERFORMANCE SHOULD HAVE AN IMPACT**
9 **ON THE AWARDED ROE. PLEASE RESPOND.**

10 A. The legal standards governing the determination of a fair authorized ROE were
11 discussed in detail in my direct testimony. Those standards are benchmarked to U.S.
12 Supreme Court cases that establish the foundation on which modern cost of capital awards
13 are decided.²¹ It is my understanding that those standards do not include managerial
14 performance. Witness Sorenson’s rebuttal testimony suggests a company’s self-professed
15 good performance record may, by itself, serve as a basis for recommending a higher ROE.
16 However, a fair authorized ROE should be based upon the utility’s cost of equity capital.
17 The *cost* of equity is influenced by market factors, not by company-specific managerial
18 performance. Those market factors serve as the basis for my analysis. That is not to say
19 that good performance is irrelevant; as the South Carolina Supreme Court indicated
20 recently, “a utility’s business practices and reputation *are two of a number of factors* the

²⁰ Rebuttal Testimony of Craig Sorensen, p. 5, lines 3-4.

²¹ Direct Testimony of David J. Garrett, pp. 11-12.

1 [Commission] *may* consider in selecting an appropriate ROE.”²² Witness Sorenson’s
2 rebuttal testimony implies that company performance should serve as the primary driver
3 for a higher recommended and awarded ROE without also taking into account the financial
4 and market considerations and other factors that have been long-established in the
5 determination of a just and reasonable awarded company return.

6 **Q. WILL YOU UPDATE YOUR SURREBUTTAL TESTIMONY BASED ON**
7 **INFORMATION THAT BECOMES AVAILABLE?**

8 A. Yes. ORS fully reserves the right to revise its recommendations via supplemental
9 testimony should new information not previously provided by the Company, or other
10 sources, become available.

11 **Q. DOES THIS CONCLUDE YOUR SURREBUTTAL TESTIMONY?**

12 A. Yes.

²² See *In re Application of Blue Granite Water Company for Approval to Adjust Rate Schedules and Increase Rates*, Opinion No. 28055 (S.C. Sept. 1, 2021); Commission Docket No. 2019-290-WS (emphasis added).